

PLATE V.

- Figs. 1, 1 a, 1 b. Catenaria otophora*, n. sp. 1 c. Operculum.
Fig. 2. Lepralia quadrata, Busk. 2 a. Operculum. 2 b. Operculum of fertile cells.
Fig. 3. Membranipora hastilis, n. sp.
Fig. 4. Cribrilina annulata, Fabricius, var. *setosa*.
Fig. 5. Lepralia onucha, n. sp. 5 a. Operculum.
Fig. 6. Retepora pectinata, n. sp., natural size. 6 a, 6 b. Anterior and dorsal surfaces, $\times 60$ diam. 6 c. Operculum.
Fig. 7. Phylactella geometrica, n. sp. 7 a. Tridentate orifice. 7 b. Operculum. 7 c. Mandible.
Fig. 8. Schizoporella Cecili, Audouin, var.

III.—*Descriptions of twelve new Species of Lycænidæ from West Africa and one from the Solomon Islands, in the Collection of Herbert Druce.* By HAMILTON H. DRUCE, F.E.S.

1. *Epitola pinodes*, sp. n.

♂. Upperside dull black. Fore wing with a patch of scarcely perceptible dull bluish scales in and below the cell. Hind wing more or less covered with dull bluish scales, excepting the margins.

Underside dull light reddish brown. Fore wing with the lower half black, extending from the base to near the outer margin. Hind wing with no markings.

Head, thorax, and abdomen black; legs black, with white spots; antennæ black above, alternately spotted with black and white below.

Expanse $1\frac{3}{5}$ inch.

Hab. W. Africa, Lagos.

This species is not nearly allied to any other, but in form and size approaches *E. dunia*, Kirby.

2. *Lycænesthes lithas*, sp. n.

♂. Upperside.—Fore wing dull glossy brown, darker on the costal and outer margins; bright violaceous from the base along the inner margin, extending upwards into the cell and bordered by the lower median nervule. Hind wing bright violaceous, apex tipped with brown; the margin very narrowly black from the apex to the anal angle; the inner margin covered with whitish hairs.

Underside brownish white, with light brown lunular

markings, bordered outwardly with white, viz. a mark at the end of the cell, beyond that an irregular band reaching from the costa, where it is narrowest, and gradually widening towards the inner margin; beyond this a marginal row of lunules. Hind wing: a mark at the end of the cell and an irregular rather broad band beyond, darker towards the anal margin; a dark spot near the base just below the subcostal nervure and a smaller one near the base close to the anal margin; two small orange spots with silvery blue scales at the anal angle.

Expanse $1\frac{2}{5}$ inch.

Hab. W. Africa, Addah.

This species is allied to *L. thyrsis*, Kirby, but is violet in place of blue above, and on the underside the markings are much larger.

3. *Pithecops steirema*, sp. n.

♂ ♀. Upperside dull black, with a broad white oval band extending from the subcostal nervure in the fore wing to about the second subcostal nervule in the hind wing.

Underside.—Fore wing white, with the costal margin very narrowly, the apex and outer margin rather broadly, black; several small black spots on the costal margin. Hind wing white, with a large black spot near the centre of the inner margin; the outer margin rather broadly black.

A row of black lunules common to the outer margins of both wings bordered inwardly and outwardly with white. Head, thorax, and abdomen black above, white below; legs white; antennæ black, spotted with white below.

Expanse $1\frac{1}{2}$ inch.

Hab. Solomon Islands.

4. *Larinopoda aspidos*, sp. n.

♂. Upperside.—Fore wing white, the costal margin narrowly, the apex and outer margin rather broadly, bordered with dull blackish brown. Hind wing white, bordered with blackish brown from the apex to the anal angle.

Underside.—Fore wing as above, with a brownish spot at the end of the cell adjoining the costal border. Hind wing bordered as above, with the dark patch near the apex (which is so conspicuous in *L. lircaea*, Hew.) included in the marginal border; a large black spot between the cell and the inner margin, but no spot in the cell.

♀. Upperside.—Fore wing as in male, but rather more nar-

rowly bordered, the border scarcely reaching to the anal angle. Hind wings pure white, with the fringe only brownish.

Underside.—Fore wings as above. Hind wings bordered with blackish brown from the apex to the anal angle, but less broadly than in the male, so that the apical patch is left almost free. There is also the black spot between the cell and the inner margin.

Head black; thorax and abdomen whitish; legs and palpi yellowish red; antennæ black, annulate with white.

Expanse $1\frac{1}{5}$ – $1\frac{3}{5}$ inch.

Hab. W. Africa, Lagos.

This species, although allied to *L. varipes*, Kirby, can be readily distinguished by its much broader borders and by the absence of any spot in the cell of the hind wing below, in that respect approaching *L. liræa*, Hew., from Old Calabar. I may also add that in the eight specimens I have examined (five males, three females) there is no appreciable difference in the width of the border, and the spots below are identical in all cases.

5. *Spalgis lemolea*, sp. n.

♂. Upperside.—Fore wing white, the base, costa, apex, and anterior margin rather broadly brown. Hind wing white, with a well-marked minute black line running along the margin from the apex to the anal angle, thickening slightly at each nervule.

Underside white, with rows of thin, irregular, brown lines, much as in *S. epius*, Westw., but less thickly covered. The marginal black line present on hind wing as on upperside, also on fore wing from the apex to the anal angle.

♀. Upperside.—Fore wing as in male. Hind wing bordered with brown from apex to the anal angle.

Underside as in male, except that the marginal line is replaced by a small black dot at the extremity of each nervule.

Head, thorax, and abdomen brown; antennæ brown; legs white, with black spots.

Expanse, ♂ $1\frac{1}{2}$, ♀ $1\frac{3}{10}$ inch.

Hab. W. Africa, Lagos.

This species, although somewhat allied to *S. epius*, Westw., on the underside, is distinguished, apart from its larger size, by the pure white wings. On the upperside the female of this species bears a close resemblance to *Larinopoda muhata*, Dewitz, as figured in 'Lepidoptera Exotica' by Mr. H. G. Smith.

6. *Spalgis pilos*, sp. n.

♀. Allied to *S. lemolea*, but the internal areas of both wings light straw-colour and the costal margin of the hind wing broadly bordered with brown from the base to the apex, where it joins the outer marginal border.

Expanse $1\frac{3}{10}$ inch.

Hab. W. Africa, Gambia.

This species can be at once distinguished from the preceding by the broad border to the costal margin, as described above.

I have no hesitation in placing these two species in the genus *Spalgis*, as they agree well in all generic characters with *S. epius*, Westw., notably the extremely short antennæ and the pointed fore wing in the male.

7. *Hypolycæna liara*, sp. n.

♂. Upperside.—Fore wing black, with the basal third suffused with light blue; an oval patch of thick, shining, light brown scales at the end of the cell. Hind wing black, suffused with light blue from the third median nervule to the inner margin: tails white, with black lines down the centres: a dark red spot bordered with black at the anal angle.

Underside whitish, with a transverse brown band common to both wings and a black marginal line. On hind wing a large black spot bordered inwardly with yellow between the first and second median nervules and a large crimson patch at the anal angle with a small black spot.

Head white; thorax and abdomen covered with bluish-white hairs; palpi black above, white below; antennæ and legs white, annulated with black.

When held at an angle this species exhibits the brilliant purple gloss common to the group, but more especially towards the anal angle of the hind wings.

Expanse $1\frac{2}{5}$ inch.

Hab. W. Africa, Addah, Lagos.

This species is distinguished by the light colour of the blue above. On the underside the markings are arranged as in *H. antifaunus*, Hew., but the tails appear much shorter and thinner. It has also the patch of scales on the fore wing above as in *H. naara*, Hew.

8. *Hypolycæna kadiskos*, sp. n.

♂. Upperside dull brownish purple. Hind wing with

three indistinct black marginal spots, bordered inwardly with white, towards the anal angle; the inner margin brownish, clothed with white hairs.

Underside brownish white, with a brown band and markings arranged as in *H. hatita*, Hew.; but, in addition to these, a short distinct brown line at the end of the cell in the fore wing and a small brown spot on the costal margin near the base on hind wing; fringe white; tails considerably shorter than in *H. hatita*.

Head, thorax, and abdomen brownish; legs and antennæ whitish, annulated with black.

Expanse $1\frac{2}{5}$ inch.

Hab. W. Africa, Lagos.

This species, which somewhat resembles *H. Buxtoni* on the upperside, would appear to be intermediate between *H. hatita*, Hew., and *H. philippus*, Fabr., on the underside.

9. *Deudorix cærulea*, sp. n.

♂. Upperside.—Fore wing glossy blue, with a darker patch at the end of the cell; the apical third and the costal margin blackish brown. Hind wing glossy blue, with the costal margin blackish brown and the inner margin greyish.

Underside light brown, with indistinct markings arranged as in *D. diyllus*, Hew., and a jet-black mark on the fore wing just above the centre of the submedian nervure. On the hind wing a black spot, bordered inwardly with yellow, between the first and second median nervules; lobe black, with yellow above; the tuft of hairs attached to the inner margin of the fore wing below is black.

♀. Upperside.—Fore wing dull light violaceous blue, the costa, apex, and outer margin broadly brown. Hind wing blue; costal margin and apex broadly, and outer margin narrowly, brown; lobe black, bordered above with yellow.

Underside as in male.

Head whitish; antennæ black, annulated with white; legs white, spotted in front with black.

Expanse, ♂ ♀ $1\frac{3}{10}$ inch.

Hab. W. Africa, Lagos.

On the underside this species is allied to *D. diyllus*, Hew., which also has the black mark as described above. Hewitson's figure (71) on pl. v. *b* of the Supplement to his Lycænidaë is almost unrecognizable. On the upperside it is distinguished by the much larger areas of blue, the blue of *D. diyllus* being of a greenish hue. The hairy tuft on the inner margin of the fore wing below is yellow in *D. diyllus*.

10. *Iolaus menas*, sp. n.

♂. Upperside.—Fore wing brilliant light blue, near *I. iasis*, Hew., in colour; apex and outer margin black, extending to the lower median nervule; costal margin narrowly black except at the base. Hind wing blue as above, the outer margin from the apex to the anal angle very narrowly bordered with black; a large triangular patch of thick black scales commencing just above the subcostal nervure and extending outwards along about one third of the first subcostal nervule and downwards to the blue; the costal margin shining greyish.

Underside.—Fore wings pure white. Hind wings much as in *I. iulus*, Hew.

♀. Upperside.—Fore wings pure white, with the costal margin, the apical third, and the outer margin blackish brown, which extends to the posterior angle; the base suffused with light blue, extending well into the wing. Hind wing pure white, with the apex blackish brown and a well-marked dark line extending from the apex to the inner margin just above the lobe; beyond this and close to the margin a row of blackish markings reaching from the apex to the second median nervule; the lobe brick-red, with a black spot and a few metallic blue scales; a large bright orange spot, bordered inwardly and outwardly with brown between the first and second median nervules, and another smaller orange spot between the submedian nervure and the first median nervule; suffused with blue at the base, but not to the extent of the fore wing.

Underside pure white, in some specimens a slight indication of an outer-marginal line to fore wing. Hind wing as in male, but the red spot between the first and second median lighter in colour.

Head white; thorax bluish; abdomen white; legs white; palpi white, tipped with black.

Expanse, ♂ $1\frac{1}{5}$, ♀ 2 inches.

Hab. W. Africa, Gambia.

The orange spot between the submedian nervure and the first median nervule on the hind wing of female above appears somewhat variable, as in some examples it is very small and in others replaced by a blackish mark. The female of this species bears a close resemblance to the female of *I. ismenias*, Klug (which is exactly like the male with the exception of the scaly patch on the hind wing at the base of the median nervules), from which it is distinguished by the well-marked inner line on the hind wing above, by the greater suffusion

of blue at the base, and by the orange spot on the hind wing above being invariably bordered on the inner side with brown. In *I. ismenias* this spot is closer to the margin than in *I. menas*.

In a male of this species from the same place the black lines on the hind wing below have entirely disappeared and likewise the yellow spots on the hind wing of a female above.

11. *Iolus lukabas*, sp. n.

♂. Allied to *I. iulus*, Hew., but without the greenish gloss.

Upperside.—Fore wing brilliant blue, with the costal margin and apical third black. Hind wing blue as above, with four distinct marginal spots of black placed between the nervules, commencing between the submedian nervure and the first median nervule and continuing upwards.

Underside pure white, with a trace of a short black line above the lobe only; a very minute brick-red spot between the first and second median nervules; lobe brick-red, with a large black spot on the outer edge; the tuft of hair which is attached to the margin of the fore wing below is yellow.

Expanse $1\frac{9}{10}$ inch.

Hab. W. Africa, Gambia.

This species is distinguished from *I. iulus* by the black-bordered costal margin and by being without the greenish gloss above, and by the absence of all lines on the underside.

12. *Iolus paneperata*, sp. n.

♂. Upperside: allied to *I. lukabas*, but smaller; the costal margin bordered with black, as in that species.

Underside.—Fore wing white, with two almost invisible greyish lines running parallel with the outer margin. Hind wing as in *I. iulus*, Hew.; the tuft of hair on the inner margin below is black.

Expanse $1\frac{2}{5}$ inch.

Hab. W. Africa, Lagos.

This species can be distinguished from the preceding by its smaller size and by the difference in the colour of the tuft of hair attached to the margin of the underside of the fore wing.

13. *Iolus iaspis*, sp. n.

♂. Allied to *I. iasis*, Hew. Upperside rather darker blue,

with a brilliant greenish gloss; the shaped inner margin of the fore wing (which in *I. iasis* is edged with white) blue; the shining patch near the base on the hind wing black in place of greyish, smaller, and not margined with white; the anal angle black.

Underside.—Fore wings as in *I. iasis*. Hind wings with the space, which is contained between the black line over the lobe and the inner margin, orange-red, with an irregular line of silvery blue through the centre. In *I. iasis* the margin only is bordered from the lobe to the end of the black line.

Head pure white.

Expanse $1\frac{1}{5}$ – $1\frac{2}{5}$ inch.

Hab. W. Africa, Addah.

Distinguished by the darker blue and the greenish gloss above and by the large patch of red at the anal angle below.

We have specimens of *I. iasis* also from Addah.

IV.—Description of a new Species of Crocidura from the Amur Region. By G. E. DOBSON, M.A., F.R.S.

THE species of *Crocidura* are generally as characteristic of the tropical and subtropical parts of the Eastern Hemisphere as those of the genus *Sorex* are of the temperate and subarctic regions. It is therefore interesting to record the discovery of a species of the first-named genus at so high a latitude as that through which the River Ussuri flows. The type of this species, which proves to have been hitherto undescribed, was found by me in the collection of the Zoological Museum of the Imperial Academy of Sciences at St. Petersburg.

Crocidura lasiura.

Larger than *C. araneus* and differing from that species conspicuously in the much longer, denser, and darker coloured fur, which is almost the same on both surfaces, in the hairiness of the tail, which is well covered with short hairs from which long ones project, in the much larger size of the pes and manus, and in the remarkable elevation of the premaxillary bones. Whereas in *C. araneus* the anterior maxillary tooth exceeds the third incisor in cross section at the base, in this species the third incisor considerably exceeds that tooth in